



## Department of Commerce

Division of State Fire Marshal  
John R. Kasich, Governor  
Jacqueline T. Williams, Director

### **SIGNIFICANT CHANGES FOR UST CLOSURES AND CORRECTIVE ACTIONS (SEPTEMBER 1, 2017)**

The following items are some of the significant changes between BUSTR's 2012 and 2017 rules. The items listed below mainly pertain to UST closures and corrective actions. Significant changes related to release prevention issues (e.g., installation requirements, release detection, etc.) are summarized in a separate document. Please refer to the 2017 rules for the regulatory requirements, and BUSTR's 2017 Technical Guidance Manual for discussion and explanation of issues regarding UST closures and corrective actions. The changes listed in this document are limited to the following rules:

- OAC 1301:7-9-01 (Applicability)
- OAC 1301:7-9-02 (Definitions)
- OAC 1301:7-9-03 (Hazardous Substances)
- OAC 1301:7-9-09 (Sensitive Area)
- OAC 1301:7-9-12 (Closure Assessment)
- OAC 1301:7-9-13 (Corrective Action)
- OAC 1301:7-9-14 (Voluntary Corrective Action)
- OAC 1301:7-9-16 (PCS Treatment)
- OAC 1301:7-9-17 (PCS Sampling and Analysis)

#### **OAC 1301:7-9-01 (APPLICABILITY)**

##### OAC 1301:7-9-01 (C) – Previously Deferred Systems

- Airport Hydrant Fuel Distribution Systems, and USTs associated with Field Constructed Tanks, that were installed before September 1, 2017 must immediately comply with the closure assessment and corrective action rules. They also need to comply with several other portions of BUSTR's rules before those dates specified in Rule 01.
- Airport Hydrant Fuel Distribution Systems, and USTs associated with Field Constructed Tanks, that were installed on or after September 1, 2017 must immediately comply with all of BUSTR's 2017 regulations, including but not limited to closure assessment and corrective action.
- UST systems installed before May 16, 2011 which store fuel for emergency generators must comply with all of BUSTR's 2017 regulations; including, but not limited to closure and corrective action. However, the release detection requirements do not apply until October 13, 2018.
- UST systems installed on or after May 16, 2011 which store fuel for emergency generators must comply with all of BUSTR's 2017 regulations, including but not limited to closure assessment and corrective action.

### OAC 1301:7-9-01 (E) – Partially Excluded UST Systems

- Wastewater treatment tank systems (including Oil/Water separators) that are not regulated under sections 402 or 307(b) of the Clean Water Act must comply with BUSTR’s Rule 13 corrective action regulations, but not with BUSTR’s other regulations.
- Aboveground storage tanks (ASTs) associated with Airport Hydrant Fuel Distribution Systems must comply with BUSTR’s Rule 13 corrective action regulations.
- ASTs associated with UST systems with field-constructed tanks must comply with BUSTR’s Rule 13 corrective action regulations.
- UST systems containing radioactive material regulated under the Atomic Energy Act must comply with BUSTR’s Rule 13 corrective action regulations but not with BUSTR’s other regulations.
- UST systems that are part of an emergency generator at a nuclear power facility licensed by the Nuclear Regulatory Commission must comply with BUSTR’s Rule 13 corrective action regulations but not with BUSTR’s other regulations.

### OAC 1301:7-9-02 (DEFINITIONS)

- Changes were made to the following definitions in OAC 1301:7-9-02(B):
  - Modification
  - Motor fuel
  - Release detection
  - Residential tank
  - Routine maintenance or normal operational upkeep
- New definitions were added for the following in OAC 1301:7-9-02(B):
  - Airport hydrant fuel distribution systems
  - Change of product
  - Containment sump
  - Field-constructed tank
  - Secondary containment
  - Sole source aquifer

### OAC 1301:7-9-03 (HAZARDOUS SUBSTANCES)

- No individual compounds were added to the list of hazardous substances.
- Rule 03 (D) was added to clarify that hazardous substances shall include a mixture of a hazardous substance and petroleum which is NOT contained in a petroleum UST system. This information was previously stated as an explanatory note at the end of Rule 03.
- Rule 03 (E) was revised to clarify that the hazardous substance table lists both individual compounds and generic categories (such as chlorinated benzenes and phthalate esters), and that any individual compound that belongs to a generic category is considered to be a hazardous substance.

### OAC 1301:7-9-09 (SENSITIVE AREAS)

- Rule 09 has been rescinded. Issues related to groundwater ingestion exposures in sensitive areas have been added to Rules 12 and 13 using USEPA’s Sole Source Aquifer areas.

## OAC 1301:7-9-12 (CLOSURE ASSESSMENT)

### OAC 1301:7-9-12 (E)(6) – Out-of-Service requirements

- For UST systems which are out-of-service for more than 12 months and which meet the performance standards in Rule 06, the time allowed to place the system back into operation or remove the system has been extended from 30 days to 90 days.
- For UST systems which are out-of-service for more than 12 months but do not meet the performance standards in Rule 06, the UST systems must be removed or closed-in-place within 90 days, unless an out-of-service permit is issued by BUSTR.

### OAC 1301:7-9-12 (G)(1)(i) – Free Product discovered during UST removal

- If free product is discovered during removal of a UST system, then the discovery must be reported to BUSTR within 24 hours and a Site Check must be conducted as described at Rule 13 (F)(3).

### OAC 1301:7-9-12 (I)(1)(e) – Leakage into soil/backfill or a containment sump

- Added statements to clarify that a Site Check is required if a component is leaking to the soil or backfill for activities conducted in accordance with 1301:7-9-12(I)(1)(c) and (d), but a Site Check is not required if the leakage has been contained within a containment sump and the sump passes a tightness test.

### OAC 1301:7-9-12 (I)(2)(b) – Closure assessment soil samples at Airport Hydrant Systems

- For Airport Hydrant Fuel Distribution Systems, a Closure Assessment Sampling Plan must be submitted for approval by BUSTR prior to collecting the closure assessment (piping) samples. The sampling plan may propose to collect soil samples beneath product piping at a frequency other than the normal frequency of one soil sample per 10 feet of piping run.

### OAC 1301:7-9-12 (I)(2)(d) – Soil samples submitted to lab from piping runs

- The number of soil samples being submitted for lab analysis has been changed for product piping run samples. One soil sample must be submitted to the lab for every five soil samples collected from underneath all product piping. The rule describes how to select which samples should be submitted for lab analysis.

### OAC 1301:7-9-12 (I)(3) – Chemicals of Concern

- Four (4) additional chemicals of concern have been added to Analytical Group 1 for light distillates and to Analytical Group 4 for used oil. Those chemicals are naphthalene, 1,2,4-trimethylbenzene, 1,2-dibromoethane (EDB), and 1,2-dichloroethane (EDC).

### OAC 1301:7-9-12 (I)(4) – Closure Assessment Action Levels

- Action Levels have been revised for all chemicals of concern due to updated toxicity data, revised physical and chemical properties, etc.

## OAC 1301:7-9-13 (CORRECTIVE ACTION)

### OAC 1301:7-9-13 (B) – Applicability

- For releases reported prior to the effective date of this rule, owner/operators may elect to conduct corrective actions in accordance with this new rule, or may continue to conduct corrective actions under the previous version of the rule. But if the O/O fails to meet a compliance deadline under a previous version of this rule, then BUSTR may transfer the release to the new version of Rule 13 for future corrective action requirements.

### OAC 1301:7-9-13 (C) – Definitions

- The definition of Suspected Release has been revised to clarify that certain incidents (e.g., leakage of product from the UST system into secondary containment, inconclusive SIR results, etc.) may not be a suspected release under certain conditions. The revised definition also clarifies several situations related to unusual operating conditions of the UST system.

### OAC 1301:7-9-13 (F) – Investigating Releases and Suspected Releases

- The tightness test requirements in (F)(2)(c) have been changed to clarify incidents where free product is discovered in a containment sump or interstitial space. Specifically, if product is discovered in a containment sump, the hydrostatic test may be conducted before or after the leaking component is repaired, as long as no repairs or alterations were made to the containment sump. But if product is discovered in the interstitial space of secondarily contained piping or a tank, the test must be conducted before the UST system is repaired.

### OAC 1301:7-9-13 (G)(3)(f) – Free Product Recovery

- Free product recovery activities may be terminated once free product is a thickness of less than 0.01-foot for three consecutive months or as otherwise directed by BUSTR. The revised language clarifies that BUSTR may allow recovery activities to be terminated prior to achieving a thickness of 0.01-foot, or may also require that free product recovery continue even though monitoring well thicknesses are less than 0.01-foot.

### OAC 1301:7-9-13 (H) – Tier 1 Source Investigations

- The petroleum products listed for Analytical Groups 1 and 2 have been changed to include gasoline blended with alcohol, biodiesel blended fuel, etc.
- Four (4) additional chemicals of concern have been added to Analytical Group 1 for light distillates and to Analytical Group 4 for used oil. Those chemicals are naphthalene, 1,2,4-trimethylbenzene, 1,2-dibromoethane (EDB), and 1,2-dichloroethane (EDC).
- Action Levels have been revised for all chemicals of concern due to updated toxicity data, revised physical and chemical properties, etc.

### OAC 1301:7-9-13 (I)(2) – Tier 1 Delineation

- As part of a drinking water determination, USEPA's Sole Source Aquifer boundaries will be used rather than using BUSTR's Designated Sensitive Areas. Separately, BUSTR has deleted OAC 1301:7-9-09 (Sensitive Areas), and these areas are no longer used in the drinking water determination.

## OAC 1301:7-9-13 (J) – Action and Delineation Levels

- Four (4) additional chemicals of concern have been added to Analytical Group 1 for light distillates and to Analytical Group 4 for used oil. Those chemicals are naphthalene, 1,2,4-trimethylbenzene, 1,2-dibromoethane (EDB), and 1,2-dichloroethane (EDC).
- Action Levels have been revised for all chemicals of concern due to updated toxicity data, revised physical and chemical properties, etc.

## OAC 1301:7-9-13 (L) – Tier 2 Evaluations

- The Tier 2 Evaluation reporting requirements have been clarified in BUSTR’s Technical Guidance Manual because there are some releases where free product is still present and being recovered after the Tier 1 Investigation Report has been approved by BUSTR. A Tier 2 Evaluation report must be submitted within 18 months of the Tier 1 Investigation approval date, as required by OAC 1301:7-9-13 (L)(7). However, because all pathways cannot be evaluated when free product is present, the Tier 2 Evaluation report must include, but is not limited to, the following:
  - an evaluation of all **non-groundwater pathways** (i.e., direct contact, soil to indoor air, and soil to outdoor air).
  - a “**free product monitoring plan**” to monitor groundwater quality in the monitoring wells located between the source area(s) and the potential receptors.
- Following termination of the free product recovery activities, all remaining pathways (i.e., groundwater pathways such as groundwater ingestion, groundwater to indoor air and soil leaching to drinking water) must be evaluated. Since all free product has been removed, the BUSTR-Screen model can now be utilized as part of this Tier 2 Evaluation Addendum.
- These issues related to Tier 2 reporting and the “free product monitoring plan” are more fully discussed in BUSTR’s 2017 Technical Guidance Manual Section 3.12.6.

## OAC 1301:7-9-13 (M) – Tier 3 Evaluations

- Public Notice requirements have been changed and now require that if letters are sent as the public notice requirement, the letters must be sent by certified mail. Owners/operators must submit proof of the public notice requirements to BUSTR within 90 days of the date on BUSTR’s public notice request letter.

## OAC 1301:7-9-13 (N) – Remedial Action

- Public Notice requirements have been changed and now require that if letters are sent as the public notice requirement, the letters must be sent by certified mail. Owners/operators must submit proof of the public notice requirements to BUSTR within 90 days of the date on BUSTR’s public notice request letter.

## OAC 1301:7-9-13 (S) – Voluntary Corrective Action

- Rule 13(S) is a new paragraph of Rule 13, and was added because Rule 14 was rescinded.

**OAC 1301:7-9-14 (VOLUNTARY CORRECTIVE ACTION)**

- Rule 14 has been rescinded. The issues related to performing voluntary corrective actions have been added to Rule 13(S).

**OAC 1301:7-9-16 (PETROLEUM CONTAMINATED SOIL (PCS))**

- The Re-use Action Levels in Table 1 have been revised for many chemicals of concern due to updated toxicity data, revised physical and chemical properties, etc.

**OAC 1301:7-9-17 (PCS SAMPLING & ANALYSIS)**

- No significant changes